

interface of Figure 2 may be a display device coupled to the client system 140 or a television set coupled to a set top box. Either implementation involves the physical separation of the controller and the display.

As to claims 21-33, note once more the interface of Figure 2 and the corresponding disclosure of col. 11, lines 1+, where all elements of the claims are met.

As to claims 65 and 66, reference clearly specifies broadcasts in either analog or digital form.

As explained further below, Cobbley et al. do not teach or suggest, as recited in Claim 18, "[a] system for reviewing a body of audiovisual information that can vary with time ... comprising ... means for controlling operation of the system [that is] physically separate from [a] means for displaying [the audiovisual information], the means for controlling including a graphical user interface for enabling specification of control instructions" (emphasis added).

Cobbley et al. teach, at column 3, lines 26-34:

FIG. 1 shows an overview of a broadcast information transmitting, receiving and distribution system 100 according to one embodiment of the present invention. Broadcast information originates at broadcast source 105. ... Broadcast source 105 transmits the broadcast information over a transmission medium 107 to broadcast receiver 110.

Cobbley et al. further teach, at column 3, lines 49-51, that "[b]roadcast receiver 110 receives the broadcast information transmitted by broadcast source 105 and transfers it to capture device 115" Cobbley et al. then teach, at column 6, lines 55-57, that "[a]fter compressing the video and audio data, capture device 115 transfers the compressed digital information to cache manager 125 via network 120." Cobbley et al. further teach, at column 7, lines 20-21, that "[c]ache manager 125 stores

the compressed information received from capture device 115 in cache 130." Cobbley et al. then teach, at column 9, lines 46-63:

Cache manager 125 is coupled to multiple client computer systems 140 via network 135. ... When an individual user of a client system 140 desires to view the news stored in cache 130, the client system 140 transmits a request to cache manager 125. Cache manager 125 returns a listing of the story segments from cache index 128 about stories available from cache 130. Based on this listing of segments, the individual user selects those that he or she wishes to view. ... Client system 140 then transmits this selection to cache manager 125, which retrieves the selected segments from cache 130 and transfers the selected segments to the client system 140 via network 135. Client system 140 then decompresses the selected segments and displays them to the individual user.

Cobbley et al. also teach, at column 10, lines 7-18:

It should be noted that although FIG. 1 is described in terms of multiple computer systems coupled together via one or more networks, the present invention is not limited to such a system. For example, the broadcast receiver 110, index data capture device 112, capture device 115, cache manager 125, cache index 128, and cache 130 may be included within a single physical unit. This single unit could be, for example, a set-top box coupled to a single television set in an individual user's home. The television is analogous to a client system 140, and could include a graphical user interface (GUI) or alphanumeric input device for inputting requests for story segments. ...

Cobbley et al. teach, at column 11, lines 1-10 (emphasis added):

FIG. 2 shows an example user-interface of the present invention. Interface 200 is displayed to the individual user by client system 140 of FIG. 1. Interface 200 may be, for example, a display device coupled to the client system 140, or a television set coupled to a set-top box.

Interface 200 includes an information display area 205, an index display 210, a storage interface 230, and a personalized newscast profile 240. Information display area 205 presents the video data stored in cache 130 of FIG. 1 to the individual user. ...

Cobbley et al. go on to describe at column 11, line 10 to

column 12, line 56 how the index display 210, storage interface 230, and personalized newscast profile 240 (as well as search tools 245 and play options 250) can be used to control the display presented in information display area 205.

Claim 18 recites (emphasis added):

A system for reviewing a body of audiovisual information that can vary with time, the system comprising:

means for displaying the audiovisual information; and

means for controlling operation of the system, the means for controlling being physically separate from the means for displaying, the means for controlling including a graphical user interface for enabling specification of control instructions.

As indicated by the above review of the teaching of Cobbley et al., Cobbley et al. teach a means for controlling (the index display 210, storage interface 230, personalized newscast profile 240, search tools 245 and play options 250) that is part of the same device (and, more particularly, the same display) that embodies a means for displaying audiovisual information (information display area 205). Cobbley et al. neither teach nor suggest that a means for controlling operation of a system for reviewing a body of audiovisual information, which means for controlling includes a graphical user interface for enabling specification of control instructions, is physically separate from a means for displaying the audiovisual information. Thus, Claim 18 is allowable over the teaching of Cobbley et al.

Applicants' specification states, at page 23, line 23 to page 24, line 10:

In the embodiment of the invention shown in FIG. 1, the system 100 according to the invention makes use of two devices for display and control: a primary display device 102 for displaying the primary information and a control device 101 for controlling the operation of the primary display device 102. Preferably, the control device 101 is physically separate from the primary display device 102 and portable so that the user has flexibility in selecting a position relative to the primary display device 102 during use of the system 100. For example, such an embodiment could allow a user to use the invention while sitting in a chair or on a couch, reclining in bed, or sitting at a table or desk. Additionally, when the secondary information is textual (e.g., the text of news stories) and the control device 101 is used to display such secondary information, the portability of the control device 101 attendant such an embodiment increases the likelihood that the text is displayed on a device that can be held in close proximity to the user, thereby improving the ability of the user to view the text. Further, as discussed in greater detail below, the control device 101 preferably has sophisticated user interface capabilities.

Applicants' specification describes the implementation of a control device including a graphical user interface having such sophisticated user interface capabilities at page 27, line 12 to page 38, line 22. Applicants' specification further states, at page 25, lines 12-18:

Where a portable computer is used to implement the control device 101, communication between the control device 101 and the rest of the system 100 is advantageously accomplished using a wireless local area network (LAN), infrared link, or other wireless communications system, so that the user will have more freedom of movement when using the control device 101.

Cobbley et al. do not teach or suggest a system for reviewing a body of audiovisual information having the advantageous characteristics of the system recited in Claim 18, as described

in the above-quoted sections of Applicants' specification.

Claims 21-33, 65 and 66 each depend, either directly or indirectly, on Claim 18 and are therefore allowable as dependent on an allowable claim. Further, Cobbley et al. neither teach nor suggest aspects of Applicants' invention recited in Claims 21-33, 65 and 66. For example, Cobbley et al. neither teach nor suggest "an interface that enables specification of the display of a summary of a segment of the audiovisual information," as recited in Claim 24. Cobbley et al. also neither teach nor suggest "means for controlling the means for displaying to restart the display of the audiovisual information in response to identification of [a] resume instruction [after a pause instruction], wherein the audiovisual information is displayed at an accelerated rate that is greater than the rate at which the audiovisual information was previously displayed, such accelerated rate continuing until the display of the audiovisual information coincides with the display that would have appeared had the display not been paused," as recited in Claim 25. Nor do Cobbley et al. teach or suggest "[a] graphical user interface includ[ing] a map region for providing a chronological description of the subject matter content of the audiovisual information and for enabling specification of control instructions that enable navigation within the audiovisual information," as recited in Claim 28 (as amended). Cobbley et al. also do not teach or suggest that such a map region can "identif[y] a segment of the audiovisual information that is currently being displayed," as recited in Claim 29, or

"identif[y] each segment of the audiovisual information that has previously been displayed," as recited Claim 30. Further, Cobbley et al. do not teach or suggest "[a] graphical user interface includ[ing] a related information region for displaying a portion of, or a representation of, a segment [of the audiovisual information] that is related to a segment [of the audiovisual information] being displayed by the means for displaying," as recited in Claim 31. Cobbley et al. also do not teach or suggest "[a] graphical user interface includ[ing] a secondary information display region for displaying a secondary information segment that is related to a segment of the audiovisual information that is being displayed by the means for displaying," as recited in Claim 32.

The Examiner rejected Claim 34 under 35 U.S.C. § 102 as being anticipated by Hidary et al. (U.S. Patent No. 5,774,664). Claim 34 has been canceled, thereby obviating the rejection of that claim.

The Examiner rejected Claims 36-46, 60, 61 and 67 under 35 U.S.C. § 102 as being anticipated by Herz et al. (U.S. Patent No. 6,020,883). The Examiner stated:

As to claim 36, note the Herz et al reference which discloses a system and method for scheduling the broadcast of and access video program and other data using customer profiles. Specifically, the system develops customer profiles for recipients describing how important certain characteristics of the broadcast video program, movie, or other data are to each customer. From these profiles, an agreement matrix is calculated by comparing the recipients profiles to the actual profiles of the characteristics of available programs, movies, or other data. Feedback paths are also provided so that each customers profiles and/or the profiles of the video programs or other data may be

modified to reflect actual usage. The claimed steps of determining ..., identifying ..., and selecting ..., are consequently met. That is, the customer profiles which reflect bodies of categorized and received information are compared to the content profiles of new (uncategorized) programs and data through an agreement matrix which represents degrees of similarity of categories of information.

Claims 37-46, 60, 61 and 67 are met by that discussed above.

Claim 36 recites "[a] method for categorizing according to subject matter an uncategorized segment of a body of information that includes a plurality of segments" (emphasis added). The Examiner has not contended, and Herz et al. do not appear to teach or suggest, categorizing an uncategorized segment of a body of information according to subject matter. Consequently, Herz et al. do not teach or suggest the steps recited in Claim 36, i.e., "determining [a] degree of similarity between the subject matter content of [an] uncategorized segment and the subject matter content of each of [one or more] previously categorized segments; identifying one or more of the previously categorized segments as relevant to the uncategorized segment based upon the determined degrees of similarity of subject matter content between the uncategorized segment and the previously categorized segments; and selecting one or more subject matter categories with which to identify the uncategorized segment based upon the subject matter categories used to identify the relevant previously categorized segments" (emphasis added)..

Herz et al. teach, at column 4, line 43 to column 5, line 7
(emphasis added):

... In accordance with the preferred method [of the invention], objective customer preference profiles are obtained and compared with content profiles of the available video programming. The initial customer profiles are determined from customer questionnaires, customer demographics, relevance feedback techniques, default profiles, and the like, while the initial content profiles are determined from questionnaires completed by "experts" or some sort of customer's panel, are generated from the text of the video programs themselves, and/or are determined by adopting the average of the profiles of those customers who actually watch the video program. Based on the comparison results, one or more customized programming channels are created for transmission

Preferably, one or more customer profiles are created for each customer of the video programs. These customer profiles indicate the customer's preferences for predetermined characteristics of the video programs and may vary in accordance with time of day, time of the week, and/or customer mood. Such "characteristics" may include any descriptive feature suitable in describing particular video programs, such as classification category; directors; actors and actresses; degree of sex and/or violence; and the like. Corresponding content profiles are created for each video program available for viewing and generally indicate the degree of content of the predetermined characteristics in each video program. ...

The Examiner stated, in discussing the relationship between the teaching of Herz et al. and Claim 36, that "the customer profiles which reflect bodies of categorized and received information are compared to the content profiles of new (uncategorized) programs and data through an agreement matrix which represents degrees of similarity of categories of information." The relationship of the Examiner's characterization of the teaching of Herz et al. to Claim 36 is unclear. If the Examiner is contending that a customer profile

taught by Herz et al. corresponds to a previously categorized segment as recited in Claim 36 and a content profile taught by Herz et al. corresponds to an uncategorized segment as recited in Claim 36, then Herz et al. do not teach or suggest the method of Claim 36 since Herz et al. do not teach that the result of a comparison of a customer profile and a content profile is a categorization of the content profile according to subject matter. Alternatively, if the Examiner is contending that a customer profile taught by Herz et al. corresponds to a previously categorized segment as recited in Claim 36 and a video program taught by Herz et al. corresponds to an uncategorized segment as recited in Claim 36, then Herz et al. do not teach or suggest the method of Claim 36 since Herz et al. do not teach that a customer profile is compared to a video program. There are other possible correspondences between the customer profile, customer, content profile and video program discussed by Herz et al. and the elements (e.g., subject matter content, previously categorized segment, uncategorized segment) of Claim 36, but those correspondences appear to be even less plausible as a basis for rejecting Claim 36 in view of the teaching of Herz et al. than those discussed above. To aid in clarifying the relationship between the teaching of Herz et al. and the method of Claim 36, Applicant points out that the method recited in Claim 36 could be used, for example, to categorize video programs according to subject matter (i.e., according to "classification category," as in the emphasized part of the above-quoted teaching of Herz et al. at column 4, line 43 to column 5, line 7) as part

of developing the content profiles that Herz et al. require in order to perform the method taught therein for "making available the video programming and other data most desired by the customer" (column 4, lines 21-22).

In view of the foregoing, Claim 36 is allowable over the teaching of Herz et al. Additionally, Claim 60, which recites limitations similar to those of Claim 36, is allowable as well. Further, Claims 37-41 each depend, either directly or indirectly, on Claim 36 and are therefore allowable as dependent on an allowable claim.

Claim 42 recites:

A method for determining whether a first set of information represented by a set of data of a first type is relevant to a second set of information represented by a set of data of a second type, the first and second sets of information being different from each other, the method comprising the steps of:
 deriving a set of data of the second type from the set of data of the first type, the derived set of data of the second type also being representative of the first set of information;
 determining the degree of similarity between the set of data of the second type representing the second set of information and the derived set of data of the second type representing the first set of information; and
 determining whether the first set of information is relevant to the second set of information based upon the degree of similarity between the set of data of the second type representing the second set of information and the derived set of data of the second type representing the first set of information.

As indicated above, in the instant Office Action, the Examiner provided a rationale for rejecting Claim 36 as anticipated by the teaching of Herz et al. and indicated that Claim 42 is anticipated by the same teaching of Herz et al. for

the same reasons. However, Claim 42 is an independent claim that recites a method having a different purpose than that of Claim 36 and includes different steps. The statements made by the Examiner in the instant Office Action regarding the teaching of Herz et al. vis-a-vis Claim 36 are inapposite with respect to Claim 42. The Examiner has not indicated how or where Herz et al. teach the limitations of Claim 42.

Since no basis for rejecting Claim 42 has been provided in the instant Office Action, Applicants request allowance of Claim 42. Additionally, Claim 61, which recites limitations similar to those of Claim 42, is allowable as well. Further, Claims 43-46 and 67 each depend, either directly or indirectly, on Claim 42 and are therefore allowable as dependent on an allowable claim.

In view of the foregoing, it is requested that the rejection of Claims 18, 21-33, 36-46, 60, 61 and 65-67 under 35 U.S.C. § 102 be withdrawn.

Rejection of Claims under 35 U.S.C. § 103

The Examiner rejected Claims 19 and 20 under 35 U.S.C. § 103 as unpatentable over Cobbley et al. (U.S. Patent No. 5,614,940).

The Examiner stated:

As to claims 19 and 20, the reference does not disclose a controller (such as that embodied by a computer or set top box) which is either portable or in 2-way wireless communication with a display. However, these features are not deemed to be patentable distinctions. That is, it is notoriously well-known in the art to provide portable computers, such as lap top computers, and to provide wireless connectivity between elements of a computer system. The examiner submits that it



would have been clearly obvious to one of ordinary skill in the art at the time the invention was made to implement the Cobbley et al system accordingly to provide flexibility to the user in the interactive broadcast experience.

Claims 19 and 20 each depend, either directly or indirectly, on Claim 18 and are therefore allowable as dependent on an allowable claim. In view of the foregoing, it is requested that the rejection of Claims 19 and 20 under 35 U.S.C. § 103 be withdrawn.

CONCLUSION

Claims 1-67 were pending. Claims 1-17, 35, 47-59 and 62-64 were allowed. Claims 18-34, 36-46, 60, 61 and 65-67 were rejected. Claim 34 has been canceled. Claim 28 has been amended. In view of the foregoing, it is requested that Claims 1-33 and 35-67 be allowed. If the Examiner wishes to discuss any aspect of this application, the Examiner is invited to telephone Applicants' undersigned attorney at (408) 945-9912.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on September 18, 2000.

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Date

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